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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/653,678	09/02/2003	Michael John Keogh		4598

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Michael John Keoga
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EXAMINER

NGUYEN, CHAU N

ART UNIT PAPER NUMBER

2831

DATE MAILED: 12/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/653,678

Applicant(s)

KEOGH, MICHAEL JOHN

Examiner

Chau N. Nguyen

Art Unit

2831

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 35-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 35-39 and 42-51 is/are rejected.
- 7) ☒ Claim(s) 40 and 41 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) *
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o).

Correction of the following is required:

Claimed subject matter as recited in claim 40 is not disclosed in the specification.

2. The amendment filed 10/19/2006 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: the amount of intumescent additive being from 2 to 100 parts by weight. Specifically, the disclosure originally has only support for the amount of 5 to 100 parts by weight but not 2 to 100 parts by weight.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 46 and 49 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The disclosure, as originally filed, does not provide support for the claimed subject matter of "the outer layer is of a predetermined thickness of at least 1 mil" as recited in claim 46 and subject matter of "the acid neutralizer is in about 0.5 to 50 parts by weight contained in 100 parts by weight of the homopolymer or copolymer of propylene" as recited in claim 49.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 35, 39 and 42 are rejected under 35 U.S.C. 102(b) as being anticipated by Rampalli et al. (4,800,351).

Rampalli et al. discloses a cable construction comprising an insulated wire and a dual layer (5 and 6 of Figure 1) thermoplastic polymer-based non-halogen protective sheath around the insulated wire, consisting of an outer intumescent solid organo, non-foamed thermoplastic polymer layer (6) as means for providing thermal, physical and mechanical protection (col. 4, lines 31-34), and an inner solid, non-foamed thermoplastic polymer layer (5) as means for providing a layer of fire protection (col. 4, lines 51-56) (re claims 35 and 42).

Rampalli et al. also discloses the outer layer being of a predetermined thickness to provide sufficient thermal protection to the flame retarded inner layer (re claim 39).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 36-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rampalli et al. in view of Weil et al. (5,578,666).

Rampalli et al. discloses the invention substantially as claimed except for the outer layer containing a polypropylene and the intumescent material of the outer layer being a melamine phosphate in an amount of 5 to 100 parts by weight contained in 100 parts by weight of polypropylene. Weil et al. discloses a flame retardant composition which is suitable for used as wire insulation and cable jacket and which comprises an effective amount of intumescent material which is melamine phosphate. Weil et al. also discloses the melamine phosphate being in about 5 to about 100 parts by weight contained in 100 parts by weight of the polypropylene. It would have been obvious to one skilled in the art to use the composition as taught by Weil et al. for the outer layer of Rampalli et al. to improve the flame retardant of the cable.

9. Claims 43, 46, 50 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rampalli et al. in view of Bisleri et al. (2001/0025720).

Rampalli et al. discloses the invention substantially as claimed except for the inner layer being polypropylene and the thickness of the dual layer being at least 5mils .

Bisleri et al. discloses a dual layer sheath comprising an inner layer which is polypropylene and the thickness of the dual layer being at least 5 mils ([0017]-

[0019]). It would have been obvious to one skilled in the art to use polypropylene for the inner layer of Rampalli et al. since polypropylene is one of many known insulating material being used for covering electrical conductor as taught by Bisleri et al. It would have been obvious to one skilled in the art to provide the dual layer of Rampalli et al. with a thickness of at least 5 mils to provide suitable fire and mechanical protection for a predetermined thickness of the conductor as taught by Bisleri et al.

10. Claims 44 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rampalli et al. in view of Bisleri et al. as applied to claim 43 above, and further in view of Weil et al. (5,578,666).

The modified sheath of Rampalli et al. discloses the invention substantially as claimed except for the outer layer containing a polypropylene and the intumescent material of the outer layer being a melamine phosphate in an amount of 5 to 100 parts by weight contained in 100 parts by weight of polypropylene. Weil et al. discloses a flame retardant composition which is suitable for used as wire insulation and cable jacket and which comprises an effective amount of intumescent material which is melamine phosphate. Weil et al. also discloses the melamine phosphate being in about 5 to about 100 parts by weight contained in

100 parts by weight of the polypropylene. It would have been obvious to one skilled in the art to use the composition as taught by Weil et al. for the outer layer of Rampalli et al. to improve the flame retardant of the cable.

11. Claims 47-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rampalli et al. in view of Bisleri et al. as applied to claim 43 above, and further in view of Kim et al. (2002/0096356).

The modified sheath of Rampalli et al. discloses the invention substantially as claimed except for the inner layer containing sufficient acid neutralizer which is magnesium hydroxide and in amount of 0.5 to 50 pbw per 100pbw of the homopolymer or copolymer of propylene. Kim et al. discloses a dual layer sheath comprising an inner layer containing sufficient acid neutralizer which is magnesium hydroxide. It would have been obvious to one skilled in the art to include magnesium hydroxide in the inner layer of Rampalli et al. to improve the flame retardant properties of the sheath as taught by Kim et al. It would also have been obvious to one skilled in the art to choose a suitable amount of the acid neutralizer in the modified inner layer of Rampalli et al. to meet the specific use of the resulting cable since the flame retardant of the cable can be adjusted by adjusting the amount of the acid neutralizer (magnesium hydroxide) as taught by

Kim et al. and since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable range involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Allowable Subject Matter

12. Claims 40 and 41 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

13. Applicant's arguments with respect to claims 35 and 43 have been considered but are moot in view of the new ground(s) of rejection.

Summary

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau N. Nguyen whose telephone number is 571-272-1980. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on 571-272-2800 ext 31. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Chau N Nguyen
Primary Examiner
Art Unit 2831